

2.2 Addition of Real #s

Properties:

1) Commutative Property of Addition

*Order does not matter.

$$3 + 4 = 4 + 3 \quad \text{OR} \quad c + d = d + c$$

$$2 \cdot 3 = 3 \cdot 2$$

$$4 - 3 \neq 3 - 4$$

$$\frac{4}{2} \neq \frac{2}{4}$$

2) Associative Property of Addition

*The way you group doesn't change outcome.

$$(2 + 3) + 4 = 2 + (3 + 4)$$

$$5 + 4 = 2 + 7$$

$$9 = 9$$

$$(a + c) + d = a + (c + d)$$

3) Identity Property of Addition

*When you get what you started with.

$$7 + 0 = 7$$

$$r + 0 = r$$

$$-10 + 0 = -10$$

4) Property of Zero OR Inverse Property

*The sum of a number & its opposite is zero.

$$12 + (-12) = 0$$

$$v + (-v) = 0$$

$$-5 + 5 = 0$$

NAME THE PROPERTY:

1. $6 + 0 = 6$

2. $2 + c = c + 2$

3. $(2 + m) + n = 2 + (m + n)$

4. $-220 + 220 = 0$

Adding Integers

If integers are the SAME SIGN:

- 1) Add their absolute values
- 2) Attach the common sign

EX 1: $12 + 7$

EX 2: $-9 + (-15)$

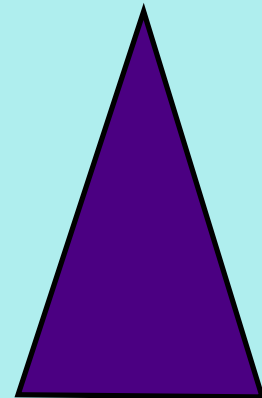
$+19$

-24

19

EX 3: $-213 + (-48) + (-296)$

$-24 \quad -9$



If the integers are DIFFERENT
SIGNS:


- 1) Subtract the smaller abs. value from the larger abs. value
- 2) Attach the sign of the # with the larger abs. value.

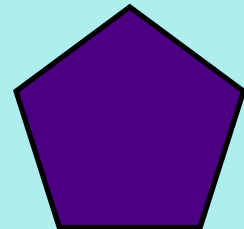
EX 4: $38 + (-29)$

EX 5: $-70 + 15$

9 -55

EX 6: $121 + (-655) + 389 + (-65)$


-70



Homework:

#13

P. 67 #27-39 odd

P. 78 #12-36, #43-
50

NO Calc!